



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,886	02/27/2002	Dan Kikinis	007287.00017	7769
22507	7590	10/27/2010		
BANNER & WITCOFF, LTD. 1100 13th STREET, N.W. SUITE 1200 WASHINGTON, DC 20005-4051			EXAMINER	
			SCHNUERR, JOHN R	
			ART UNIT	PAPER NUMBER
			2421	
MAIL DATE	DELIVERY MODE			
10/27/2010	PAPER			

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/085,886	<b>Applicant(s)</b> KIKINIS, DAN
	<b>Examiner</b> JOHN SCHNURR	<b>Art Unit</b> 2421

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 10 August 2010.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-12 and 18-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-12 and 18-29 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/GS-68)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

#### **DETAILED ACTION**

1. This Office Action is in response to the Amendment After Non-Final Rejection filed 08/10/2010. Claims 1-12 and 18-29 are pending and have been examined.
2. The information disclosure statement (IDS) submitted on 09/17/2010 was considered by the examiner.

#### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-12 and 18-25 have been fully considered but they are not persuasive.

In response to applicant's arguments, with respect to claim 1, against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this case the combination of McClard (US 6,438,752) and Wang (US 2003/0028871) teaches a system in which a category is added from a first set of categories to a second set when content belonging to that category is watched for a predetermined time period (col. 5 line 52 to col. 6 line 9 McClard), the time content belonging to the category is watched is the sum of a plurality of individual viewings ([0034] Wang).

In response to applicant's arguments, with respect to claims 6 and 12, the examiner respectfully disagrees. Schaffer (US 2002/0067554) clearly teaches verifying a change in a user profile with the user ([0048]). The combination of Schaffer with the above described combination of McClard and Wang results in the system verifying the

inclusion of a category in the users profile if it appears to conflict with previous information.

In response to applicant's arguments, with respect to claims 18 and 19, the examiner respectfully disagrees. McClard clearly teaches adding a category to the second set if the number of selections is greater than the number of selections required to be listed as a favorite category (col. 6 line 62 to col. 7 line 7).

In response to applicant's arguments, with respect to claims 22 and 23, the examiner respectfully disagrees. McClard clearly teaches "determining" or creating a demographic profile based on the weight of a category (col. 6 line 62 to col. 7 line 7).

4. Applicant's arguments with respect to claims 26-29 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 28 and 29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims require differentiation of a graph of the duration of relative viewing times to determine a maximum peak of the graph. The

specification, paragraph [0017], contains no disclosure of a graph of relative viewing times or determining a peak from that graph using differentiation.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 4, 5, 7, 10, 11 and 18-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over McClard (US 6,438,752) in view of Wang et al. (US 2003/0028871), herein Wang, in view of Knee et al. (US 2002/0095676), herein Knee and further in view of Klarfeld et al. (US 2003/0067554), herein Klarfeld.

Referring to claim 1, McClard teaches a method performed by a processor comprising:

adding a category from a first set of categories of broadcasted programs provided by a media provider (**Head-end server 34 provides media and category information, column 4 lines 27-39.**) to a second set of categories of broadcasted programs in response to a broadcasted program viewing device being tuned, for a period of time at least equal to a first predetermined threshold, to a broadcasted program predetermined to be in the category from the first set, wherein the second set of categories comprises a plurality of behavior peaks; (**Column 4 lines 64-67 and Figure 3 element 54 teaches storing program category information in the memory and Column 5 lines 52-67 and Column 6 lines 1-9 teaches that when a program is watched for a period of time the program is added to a frequency watch list in memory 56 of Figure 3 and along with the program name the type/genre is added to memory 56 thus the category of a program is added from a first set of categories in memory 54 to a second set of data that includes categories in memory 56;**).

Art Unit: 2421

However, McClard does not explicitly teach updating the second set in response to a plurality of broadcasted programs being tuned for a period of time at least equal to a first predetermined threshold.

In an analogous art, Wang, which discloses a system for collecting viewing information, clearly teaches updating a second set in response to a plurality of broadcasted programs being tuned for a period of time at least equal to a first predetermined threshold. (**Session time is added to total time and if total time is greater than a predetermined threshold the preference profile is updated, [0034].**)

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of McClard by updating the second set in response to a plurality of broadcasted programs being tuned for a period of time at least equal to a first predetermined threshold, as taught by Wang, for the benefit of determining channel surfer preferences ([0034] Wang).

McClard further teaches creating multiple profiles. (**column 5 lines 19-41**) McClard combined with Wang fails to teach determining a demographic profile based on the second set; and selecting a first advertisement based on the demographic profile.

In an analogous art, Knee teaches determining a demographic profile based on the second set (**Paragraphs [0029] and [0030] and Figure 2 teach determining demographic categories for a user; Paragraph [0036] teaches that a show's category is used determine a user's demographic profile;**) and selecting a first advertisement based on the demographic profile (**Paragraph [0050] teaches determining an advertisement from the user demographic profile.**)

At the time the invention was made it would have been obvious for one skilled in the art to modify the category set moving method McClard combined with Wang using the demographic profiling and advertisement determination method of Knee for the purpose of categorizing user information into demographic categories that could then be used for specified purposes, such as for targeting advertisements or taking certain actions in the program guide (Paragraph [0007], Knee).

However, McClard combined with Wang and Knee does not explicitly teach each demographic profile corresponds to a different behavior peak and wherein each behavior peak and each demographic profile is assigned to a different user.

In an analogous art, Klarfeld, which discloses a system for personalizing television, clearly teaches each demographic profile corresponds to a different

behavior peak and wherein each behavior peak and each demographic profile is assigned to a different user. (**Paragraphs [0226]-[0230] and Figure 36 teach creating multiple profiles corresponding to multiple users and determining user profiles based on the observed behavior peaks of the users.**)

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of McClard combined with Wang and Knee by determining a plurality of demographic profiles by analyzing behavior peaks indicated by the second set, as taught by Klarfeld, for the benefit of simplifying the profile system for the user ([0226] Klarfeld).

Referring to **claim 4**, depending on claim 1, Knee teaches receiving a set of advertisements including the first advertisement (**Paragraph [0023]**).

Referring to **claim 5**, depending on claim 1, Knee teaches removing a category from the second set in response to the broadcast program viewing device not being tuned for a period of time at least equal to a second predetermined threshold, to at least one broadcasting program predetermined to be in the category from the second set (**Paragraph [0044]**).

Referring to **claim 7**, see the rejection of claim 1; (**McClard Figure 3 teaches element 50 a processor and element 52 is memory according to Column 4 lines 54-61; Knee teaches Figure 1 and elements 64 memory and 60 a microprocessor according to Paragraph [0028]**.)

Referring to **claim 10**, depending on claim 7, see the rejection of claim 4.

Referring to **claim 11**, depending on claim 7, see the rejection of claim 5.

Referring to **claim 18**, depending on claim 1, McClard teaches adding a category from the first set to the second set in response to multiple selections of at least one broadcasted program predetermined to be in the category from the first set, said multiple selections at least equal to a predetermined number of selections. (**col. 6 line 62 to col. 7 line 7**)

Referring to **claim 19**, depending on claim 7, see the rejection of claim 18.

Referring to **claim 20**, depending on claim 1, McClard teaches adding a category from the first set to the second set of categories in response to a selecting of the category from the first set. (**Column 5 lines 52-67 and Column 6 lines 1-9 teaches that when a program is watched for a period of time the program is added to a frequency watch list in memory 56 of Figure 3 and along with the program name the type/genre is added to memory 56 thus the category of a program is added from a first set of categories in memory 54 to a**

**second set of data that includes categories in memory 56 when the category is selected by tuning the program.)**

Referring to **claim 21**, depending on claim 7, see the rejection of claim 20.

Referring to **claim 22**, depending on claim 1, McClard teaches increasing a weight value of a category based on a duration of viewing time for at least one broadcasted program in that category (**Column 6 lines 5-9 teaches if the user watches a particular program for a predetermined period of time the genre is stored in frequency memory 56.**); and wherein the step of determining a plurality of demographic profiles includes utilizing weight values for categories to determine said demographic profiles. (**Column 6 line 62 to Column 7 line 7 teaches the weight of the genre for a particular time period is used in the user profile.**)

Referring to **claim 23**, depending on claim 7, see the rejection of claim 22.

Referring to **claim 24**, depending on claim 1, Knee teaches removing a category from the second set in response to a selection of the category from the second set (**Categories which have not been viewed are selected to be removed [0044].**)

Referring to **claim 25**, depending on claim 7, see the rejection of claim 24.

9.    **Claims 2, 3, 8 and 9** are rejected under 35 U.S.C. 103(a) as being unpatentable over **McClard (US 6,438,752 B1)** in view of **Wang et al. (US 2003/0028871)** in view of **Knee et al. (US 2002/0095676)** further in view of **Klarfeld et al. (US 2003/0067554)**, as applied to claims 1 and 7 above, and further in view of **Ellis et al. (US 2003/0020744)**, herein Ellis.

Referring to **claim 2**, depending on claim 1, McClard, Wang, Knee and Klarfeld fail to teach displaying the first advertisement with an interactive programming guide.

In an analogous art Ellis teaches displaying the first advertisement with an interactive programming guide (**Paragraphs [0125] and [0126] teach selecting an advertisement and Paragraph [0110] teaches using viewer history to determine which advertisements to use in the program guide, Figure 5 elements 108.**)

At the time the invention was made it would have been obvious for one skilled in the art to modify the combined methods of McClard, Wang, Knee and Klarfeld using the targeted advertisement display method of Ellis for the purpose of providing users a user customized program guide experience (Paragraph [0010], Ellis).

Referring to **claim 3**, depending on claim 1, McClard, Wang, Knee and Klarfeld fail to teach transmitting the second set to a unit at a head end of a broadcasting system.

In an analogous art Ellis teaches transmitting the second set to a unit at a head end of a broadcasting system (**Paragraphs [0125] and [0126] and Figure 2b teach transmitting the user history to the program guide server element 25**).

At the time the invention was made it would have been obvious for one skilled in the art to modify the combined methods of McClard, Wang, Knee and Klarfeld using the transmission of recorded user history data to the head end of Ellis for the purpose of providing users' a user customized program guide experience (Paragraph [0010], Ellis).

Referring to **claim 8**, depending on claim 7, see rejection of claim 2.

Referring to **claim 9**, depending on claim 7, see rejection of claim 3.

10. Claims **6 and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over **McClard (US 6,438,752 B1)** in view of **Wang et al. (US 2003/0028871)** in view of **Knee et al. (US 2002/0095676)** further in view of **Klarfeld et al. (US 2003/0067554)**, as applied to claims 1 and 7 above, and further in view of **Schaffer et al. (US 2002/0104087)**, herein Schaffer.

Consider **claim 6**, McClard, Wang, Knee and Klarfeld, combined as in claim 1, clearly teach adding a category from a first set to a second set.

However, McClard, Wang, Knee and Klarfeld do not explicitly teach verifying profile updates with a viewer.

In an analogous art, Schaffer, which discloses a system for maintaining a user profile, clearly teaches verifying profile updates with a viewer. (**The feedback**

**request command queries the user about a program being watched, [0048].)**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of McClard, Wang, Knee and Klarfeld by verifying profile updates with a viewer, as taught by Schaffer, for the benefit of maximizing the performance of a television recommender ([0010] Schaffer).

Referring to **claim 12**, depending on claim 7, see rejection of claim 6.

11. **Claims 26 and 27** are rejected under 35 U.S.C. 103(a) as being unpatentable over **McClard (US 6,438,752 B1)** in view of **Wang et al. (US 2003/0028871)** in view of **Knee et al. (US 2002/0095676)** further in view of **Klarfeld et al. (US 2003/0067554)**, as applied to claims 1 and 7 above, and further in view of **Bedard. (US 5,801,747)**.

Consider **claim 26**, McClard, Wang, Knee and Klarfeld, combined as in claim 1, clearly teach adding a category from a first set to a second set.

However, McClard, Wang, Knee and Klarfeld do not explicitly teach the broadcasted program viewing device being tuned to a first broadcasted program, predetermined to be in the category from the first set, for a first period of time; and the broadcasted program viewing device being tuned to a second broadcasted program, also predetermined to be in the category from the first set, for a second period of time; wherein the sum of the first period of time and second period of time is at least equal to the first predetermined threshold.

In an analogous art, Bedard, which discloses a system for monitoring user activity, clearly teaches the broadcasted program viewing device being tuned to a first broadcasted program, predetermined to be in the category from the first set, for a first period of time; and the broadcasted program viewing device being tuned to a second broadcasted program, also predetermined to be in the category from the first set, for a second period of time; wherein the sum of the first period of time and second period of time is at least equal to the first predetermined threshold. (**Fig. 2: The viewing units for each category from different channels are added to one another to determine the period of viewing for each category, col. 4 lines 49-65.**)

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of McClard, Wang, Knee and Klarfeld by adding the viewing times of each category independent of the

channel to determine the total viewing time, as taught by Bedard, for the benefit of more accurately measuring viewer behavior.

Referring to **claim 27**, depending on claim 7, see rejection of claim 26.

**Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN SCHNURR whose telephone number is (571)270-1458. The examiner can normally be reached on M-F 9a-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John W. Miller/  
Supervisory Patent Examiner, Art Unit 2421

JRS